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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,818	07/14/2003	Toshiki Taguchi	Q76550	5231

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

FAISON, VERONICA F

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,818

Applicant(s)

TAGUCHI

Examiner

Veronica F. Faison

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 5-9 is/are rejected.
7) ☒ Claim(s) 3 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claims 1, 3, 5-8 have been amended, claim 9 has been added and claims 2 and 4 have been canceled. Hence, claims 1, 3, and 5-9 are pending in the application. The amendment was persuasive to the extent that the Obvious Double Patenting rejection has been withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 provides for the use of a composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

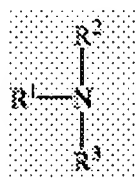
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yano et al (US Patent 6,015,455).

Yano et al teaches an ink jet recording ink comprising water, water-soluble organic solvent, at least one dye (water-soluble dye) having at least one carboxyl group in the form of a free acid, a substituted aromatic compound and at least one alkali metal hydroxide (abstract and col. 2 lines 58-63). The reference also teaches an ink jet recording method in which such ink droplets are discharged from an orifice according to a recording signal to record an image (abstract and col. 2 lines 49-53, col. 44 lines 38-51). The ink composition may further comprise an amine compound of the general formula, which is the same as formula (10) set forth in claim 3 as a precursor of acid:

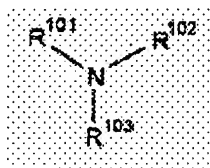


one or two of R¹, R² and R³ is an alkyl group having 1 to 5 carbon atoms, and the remainder is a group selected from a hydrogen atom, an alkyl group having 1 to 5 atoms, and a substituted alkyl group having 1 to 5 carbon atoms in the alkyl chain and substituted by a hydroxyl group or carbamoyl group. Two of R¹, R² and R³ may be the same substituent (col. 41 lines 42-62). The amine compound may be used alone or in combination and present in the amount of 0.1 to 8 percent by weight (col. 42 lines 61-65). Applicant discloses on page 7-25 of the specification, that the precursor of acids compounds showing no acidity at the time of preparation or storage but capable of

rendering the ink system acidic as a result of the reaction are the compounds represented by formulas (1)-(10). The ink composition may also comprise a surfactant to further stabilize the condition of the dye solution (col. 43 lines 52-53). See claims 1, 4, 5, 14 and 15. The composition as taught by Yano et al appears to anticipate the claimed invention.

Claims 1, 5-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Omatsu et al (US Publication 2003/0097959).

Omatsu et al teaches an ink composition comprising an azo dye having an aromatic nitrogen-containing 6-membered heterocycle, a compound represented by formula (I):



wherein R101 and R102 each independent represents a hydrogen atom, an aliphatic group, a heterocyclic group, and an acyl group; R103 represents an aromatic oxy group, aliphatic thio group, an aromatic thio group, an acyloxy group and a substituted or unsubstituted amino group or hydroxy group and an aqueous medium wherein the azo dye is dissolved or dispersed in the aqueous medium (abstract, page 1 para. 0012-0014 and page 22 para. 0115+). The compound of formula (I) is present in the amount of 2 to 200 parts by mass based on 100 parts by mass of the dye (page 27 para. 0127). The reference further teaches that various additives such as surface tension regulators (i.e. surfactants) can be used in the composition (page 30 para. 0160- page 31 para. 0171). The examples teach an ink set using the ink composition described above. The

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reference further teaches the use of an ink jet printing method, which ejects the ink composition by a known recording process (page 32 para. 0193). Applicant discloses on page 7-25 of the specification, that the precursor of acids compounds showing no acidity at the time of preparation or storage but capable of rendering the ink system acidic as a result of the reaction are the compounds represented by formulas (1)-(10). The composition as taught by Omatsu et al appears to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 911 374.

EP 0 911 374 teaches an ink set comprising at least a black ink, a yellow ink, a magenta ink and a cyan ink wherein each ink comprises at least a colorant, a water-soluble cationic polymer and water (abstract and page 3 lines 21-26). The colorant present in the ink composition are organic color materials soluble in water (page 3 line 55). The ink composition may further comprise a dissolution accelerator (precursor of acid) such as water-soluble azine compounds including pyrazine and triazine, which broad enough to encompass the formula (7) set forth in claim 3 (page 5 lines 4-28 and page 6 lines 9-15). It is the position of the Examiner that similar compositions with

similar components would obviously perform in the same matter (i.e. precursor of acid showing no acidity) absence evidence to the contrary. EP 0 911 374 fails to specifically exemplify the use of precursor of acid (dissolution accelerator) as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the dissolution accelerator (precursor of acid) as claimed by applicant as EP 0 911 374 also discloses the use of dissolution accelerator (precursor of acid) but shows no example incorporating them.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The references alone or in combination fail to teach an ink composition comprising a precursor of acid as set forth in claim 3 in view of the rest of the claim limitations.

Response to Arguments

Applicant's arguments filed 1-26-05 have been fully considered but they are not persuasive.

Applicant argues that the amendments to the claims herein, including the incorporation of claims 2 and 4 into claim 1 and the amendment of claim 3 distinguish over all of the art cited.

It is the position of the Examiner that the incorporation of claims 2 and 4 into claim 1 does not overcome that 102 and 103 rejections. Although the rejections have been overcome by the amendment to claim 3, which now has been indicated allowable, the rejection over now amended claim 1 has been maintained, because the ink composition still has the properties of "wherein the precursor of acid is a compound showing no acidity at the time of preparation and storage of the ink, but capable of releasing acids by a reaction after aging or printing, or capable of rendering the ink system acidic as a result of the reaction; and which comprises the precursor of acid in an amount of 0.01 to 20 wt%", even though the specific structure (formula 10), has been cancel from claim 3, claim 1 is not formula dependent therefore the rejections are still applicable.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

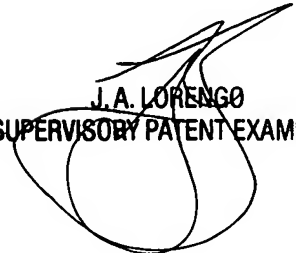
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VFF
5-15-05


J.A. LORENGO
SUPERVISORY PATENT EXAMINER